



R/V MELVILLE

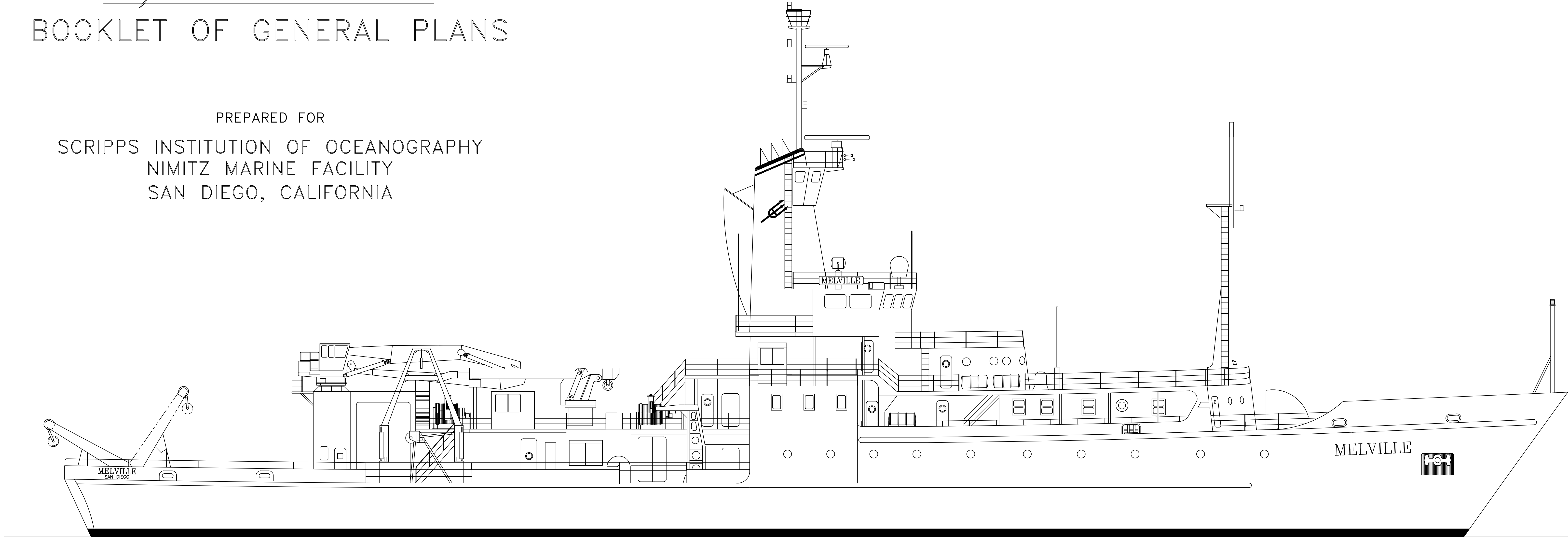
BOOKLET OF GENERAL PLANS

PREPARED FOR

SCRIPPS INSTITUTION OF OCEANOGRAPHY

NIMITZ MARINE FACILITY

SAN DIEGO, CALIFORNIA



R/V MELVILLE

BOOKLET OF GENERAL PLANS

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APRIL 2001

REVISION A

SUMMARY OF TANK CAPACITIES					
SALT WATER BALLAST					
COMPARTMENT	FRAME	GAL (100% FULL)	L. TONS	VCG ABV BTM KEEL	LCG FROM MIDSHIPS +/-
3-0-0	0-6	10,095	38.6	20.43	119.41
3-31-1	31-38	9493	36.3	10.88	60.00
3-31-2	31-38	9493	36.3	10.88	60.00
4-16-1	16-24	7322	28.0	12.55	87.39
4-16-2	16-24	7322	28.0	12.55	87.39
4-24-0	24-38	12,925	49.4	7.64	68.08
4-84-5	84-94	14,605	55.8	11.96	-50.19
4-84-6	84-94	14,605	55.8	11.96	-50.19
4-94-3	94-102	7552	28.8	12.26	-66.36
4-94-4	94-104	8885	33.9	12.37	-67.94
DIESEL OIL					
COMPARTMENT	FRAME	GAL (100% FULL)	L. TONS	VCG ABV BTM KEEL	LCG FROM MIDSHIPS +/-
4-16-0	16-24	22,850	67.5	8.69	88.86
4-24-1	24-31	20,056	59.3	10.77	73.65
4-24-2 (90%)	24-31	18,050	59.3	10.77	73.65
4-38-1	38-50	7455	22.0	2.52	40.77
4-38-2	38-50	6825	20.2	2.52	39.86
4-50-1	50-63	8352	24.7	2.53	16.00
4-50-2	50-63	8352	24.7	2.53	16.00
4-67-0 (90%)	67-84	14,639	48.1	3.82	-21.74
4-67-1	67-84	9123	27.0	4.46	-19.99
4-67-2	67-84	8743	25.8	4.44	-19.25
4-84-0	84-94	27,120	80.2	10.33	-47.04
LUBRICATING OIL					
COMPARTMENT	FRAME	GAL (95% FULL)	L. TONS	VCG ABV BTM KEEL	LCG FROM MIDSHIPS +/-
4-84-1	84-86	1363	4.7	10.95	-40.99
4-84-2	84-86	1363	4.7	10.95	-40.99
4-84-3	84-86	1693	5.8	13.42	-41.00
4-84-4	84-86	1693	5.8	13.42	-41.00
ROLL STABILIZATION OPERATING LEVEL					
COMPARTMENT	FRAME	GAL @ OPR'G LVL	L. TONS	VCG ABV BTM KEEL	LCG FROM MIDSHIPS +/-
4-31-0	31-38	18,849	70.1	5.86	59.65
FRESH WATER					
COMPARTMENT	FRAME	GAL (100% FULL)	L. TONS	VCG ABV BTM KEEL	LCG FROM MIDSHIPS +/-
2-34-0	34-38	3934	14.6	22.46	57.00
2-34-1	34-38	3834	14.2	22.34	57.00
2-45-1	45-50	4064	15.1	21.46	34.00
2-45-2	45-50	4064	15.1	21.46	34.00
WASTE, SLOP & DAY TANKS					
COMPARTMENT/TYPE	FRAME	GAL (100% FULL)	L. TONS	VCG ABV BTM KEEL	LCG FROM MIDSHIPS +/-
4-63-1 (WASTE OIL)	63-67	1885	6.4	2.70	-1.00
4-63-2 (SLOP TANK)	63-67	3046	12.4	2.43	-1.00
3-67-1 (DAY TANK)	67-71	2580	8.0	12.00	-9.00
3-67-3 (DAY TANK)	67-71	3997	12.4	11.59	-9.00
SEWAGE TANKS					
COMPARTMENT	FRAME	GAL (100% FULL)	L. TONS	VCG ABV BTM KEEL	LCG FROM MIDSHIPS +/-
4-94-2	94-104	8092	30.9	12.00	-68.21

SMALL BOATS & LIFE RAFTS				
NO.	TYPE	LOCATION	NO. PERSONS EACH	TOTAL PERSONS
3	LIFE RAFT (INFLATABLE)	01 LEVEL	20	60
5	LIFE RAFT (INFLATABLE)	01 LEVEL	25	125
1	RESCUE BOAT	01 LEVEL	-	-

CRANES	
1 - "ALLIED" MARINE CRANE MODEL K12-65 (ALLIED SYSTEMS COMPANY)	
1 - "PETTIBONE" MARINE CRANE MODEL TB	

PROPULSION DATA	
2 - PROPULSION THRUSTER UNITS "SCHOTTELLIPS" TYPE S1501/1000 DRIVEN BY (2) 1500 HP "G.E." ELECTRIC MOTORS	

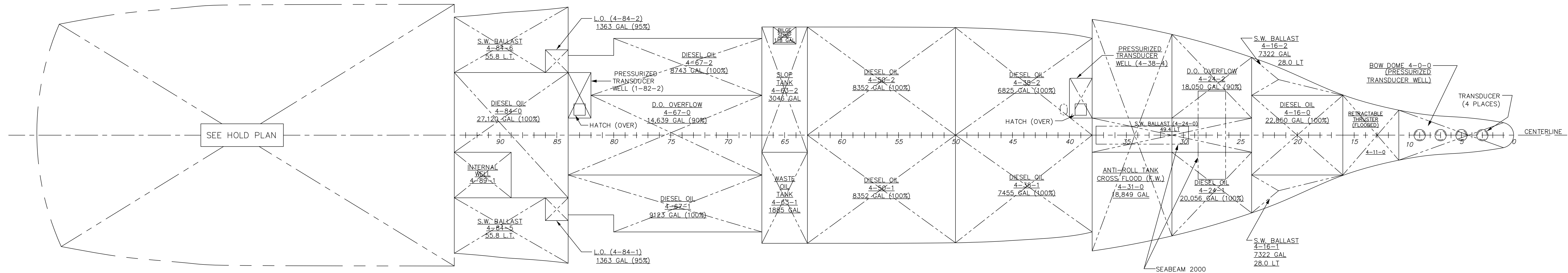
RETRACTABLE BOW THRUSTER	
1 - "SCHOTTELLIPS" TYPE S503LSV THRUSTER DRIVEN BY (1) 900 HP "G.E." ELECTRIC MOTOR	

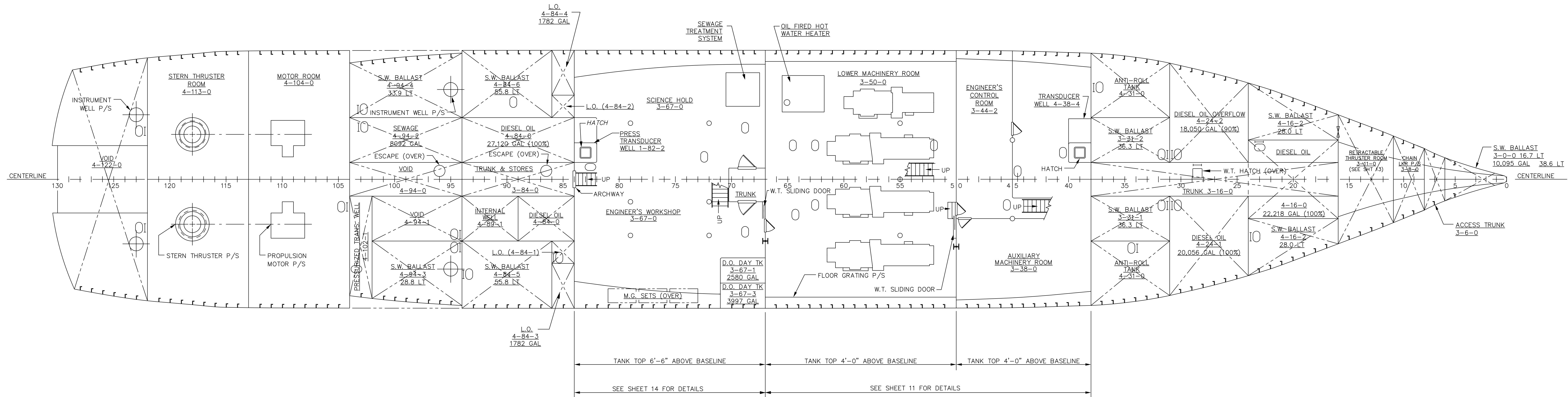
MACHINERY DATA	
3 - "CATERPILLAR" 3516 DIESEL GENERATOR SETS 1090 KW 1200 RPM 600 VAC 3 PHASE 60 CYCLES	
1 - "CATERPILLAR" 3508 DIESEL GENERATOR SET 560 KW 1200 RPM 600 VAC 3 PHASE 60 CYCLES	
1 - "DETROIT DIESEL" 12V71 DIESEL GENERATOR SET (EMERGENCY GENERATOR) 200 KW 1800 RPM 480 VAC 3 PHASE 60 CYCLES	
1 - MOTOR GENERATOR SET (400 HZ) 5 KW 120 VAC 400 CYCLES	
1 - MOTOR GENERATOR SET (CLEAN POWER) 30 KW 120 VAC 60 CYCLES	
1 - MOTOR GENERATOR SET (ELECTRONIC POWER) 30 KW 120 VAC 60 CYCLES	

GENERAL DIMENSIONS	
LENGTH OVERALL (LOA).....	278'-10"
LENGTH BETWEEN PERPENDICULARS (LBP).....	254'-0"
BREADTH, MOLDED (MAX).....	46'-0"
LOAD LINE DRAFT.....	16'-6"
DEPTH, MOLDED AMIDSHIPS MAIN DECK TO BASELINE AT SIDE.....	25'-0"
DISPLACEMENT AT LOAD LINE.....	2945 LTSW

SHIP'S COMPLEMENT	
OFFICERS & CREW.....	25
SCIENTIFIC PERSONNEL.....	37
TOTAL.....	62

NOTES	
1. SHEET 2 AND SHEETS 11 THRU 18 WERE COPIED FROM MCDERMOTT DRAWING H9005-100-14.	
2. CAPACITIES SHOWN ON PLANS FOR D.O. TANKS ARE 100% FULL (90% FULL FOR OVERFLOW TANKS). SALT WATER BALLAST TANKS ARE 100%.	





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R/V MELVILLE BOOKLET OF GENERAL PLANS
HOLD PLAN

DRAWN BY <u>ALGER</u>	DATE <u>6/16/92</u>	SCALE <u>1/8"=1'-0"</u>
CHECKED BY <u>JLRE</u>	DATE <u>7/21/92</u>	DRAWING NUMBER <u>8805-92-M</u>
APPROVED BY <u>HURLEY</u>	DATE <u>7/21/92</u>	REV <u>4 A</u>

